

DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project: Halfmoon
Date: July 13 to 17 1998
Logged by: Robert Calhoun
Drilling Co: Colbert Drilling

DDH: HM98-18

Claim Number: 1190197

COLLAR LOCATION: L10250N/5500E

SURVEYS: Acid Test

TIMMINS COORDINATES

GRID COORDINATES

	<u>Depth</u>	<u>Azimuth</u>	<u>Dip</u>
Setup:	0.0	206°	-50°
	100m		-47°
	200m		-44°
	300m		-39°

Northing:	10250N
Easting	5500E
Elevation: 0.0	
TD: 300.0 meters	

DRILLING DATES

Started: July 13, 1998
Finished: July 17, 1998



42A12SE2005 2.19028 ROBB

DIAMOND DRILL SUMMARY LOG

Project: Halfmoon
 Date: July 13 to 17 1998
 Logged By: Robert Calhoun

DDH: HM98-18

GEOLOGIC SUMMARY

FROM		TO	DESCRIPTION	INTERVAL			SIGNIFICANT ASSAY AVERAGES				
(m)	(m)			From (m)	To (m)	Width (m)	Cu ppm	Zn ppm	Pb ppm	Ag g/t	Au ppb
0.0	25.3		Overburden								
25.3	31.8		Felsic Volcanic								
31.8	58.2		Mafic Volcanic								
58.2	65.6		Intermediate Volcanic								
65.6	73.8		Mafic Volcanic								
73.8	91.0		Mafic Volcanic								
91.0	139.3		Mafic Volcanic								
139.3	141.7		Felsic Volcanic-Tuff								
141.7	151.1		Mafic Volcanic								
151.1	158.0		Mafic Volcanic								
158.0	177.0		Mafic Volcanic								
177.0	184.0		Mafic Volcanic								
184.0	205.1		Felsic Volcanic(Rhyolite)								
205.1	209.7		Mafic Intrusive								
209.7	225.1		Felsic Volcanic								
225.1	269.8		Mafic Volcanic								
269.8	280.5		Felsic Volcanic								
280.5	287.7		Mafic Volcanic								
287.7	300.0		Felsic Volcanic								
300.0			End of Hole								

COMMENTS

Diamond Drill Log

Property: Halfmoon

Hole Number: PAL-HM98-18

Claim Number: 1190197

Location: 10250N/5500E

Final Depth: 300.0 meters

Logged By: Robert Calhoun

Azimuth: 206 G.S

Dates Drilled: July 13-17 1998

Drilled By: Colbert Drilling

Dip: -50°

Dates Logged: July 14-17 1998

Signature: _____

Assays											
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
0	25.3	Overburden									
25.3	31.8	<p>Felsic Volcanic</p> <p>-fine grained to granular, medium grey green, massive to foliated /laminated. Unit is calcitic, weakly sericitic.</p> <p style="padding-left: 20px;">25.3-28.0</p> <p>-fine massive, highly fractured to crushed, weak foliation at 51° to core axis.</p> <p style="padding-left: 20px;">28.0-31.8</p> <p>-well foliated/laminated at 54° to core axis. Lamination defined by alternating grey green and pale green to whitish bands. Lighter bands have increased calcite, probable sericite. Calcite also occurs as small discontinuous veinlets.</p>									
31.8	58.2	<p>Mafic Volcanic.</p> <p>-fine grained, medium to dark green to green grey, massive to weakly foliated at 54° to core axis. Unit is calcitic in matrix and has calcite veinlets, foliation oriented. Unit is locally amygduloidal, leucoxenitic over a few meters.</p> <p style="padding-left: 20px;">Pyrite, 1%, occurs as small cubes and disseminations-along foliation, locally as clusters of medium cubes and minor fine disseminations.</p> <p style="padding-left: 20px;">Chlorite is ubiquitous and as local "layers". Local calcite/epidote veins (minor).</p>									

Diamond Drill Log

Hole # PAL-HM98-18

							Assays				
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
58.2	65.6	Intermediate Volcanic -fine grained, light green to dark green, soft, pseudo-banded may be an alteration effect. Unit has alternating chlorite/sericite bands with local horsetail structures. Unit is probable tuff. Pyrite is minor. Minor small quartz veins.									
65.6	73.8	Mafic Volcanic -fine grained, medium to dark green, soft, chloritic. Weakly foliated at 53° to core axis. Pyrite 1-3% as clusters of small 2 mm cubes in chloritic veined areas, as fine foliation related cubes and rarely as fine grains in crescent shaped concentrations. Unit is again possibly tuffaceous in nature, calcitic. 70.0-73.8 -increased quartz veining 5-10% as 1-3 cm veins, 50-80° to core axis. Pyrite in this section is minor. 73.7 -small "veinlet" of chalcopyrite along foliation, occupying less than ½ the core width.									
73.8	91.0	Mafic Volcanic -fine grained, dark green, soft, chloritic, massive in appearance. Upper section to 79.7m contains leucoxene, fine grains. The middle section to 87.1m contains whitish grey flecks 1-2mm in size which has the appearance of broken varioles as in the chicken feed unit in the Timmins Camp. The lower section has smaller flecks <0.5mm and possible leucoxene. Unit is calcitic.									
91.0	139.3	Mafic Volcanic -fine grained, medium to dark green, soft, chloritic to sericitic. Massive to weakly foliated, 56° to core axis. Unit has local pyrite to 1% but generally pyrite is minor. Calcite in matrix and as small veinlets, foliation related. 92.9-104.2 -Quartz veined section-quartz veining 5-15% as up to									

Diamond Drill Log

Hole # PAL-HM98-18

							Assays				
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		to 60cm veins, generally <20cm randomly oriented. The quartz is bull white quartz milky to glassy. 98.2 -irregularly shaped blebs of chalcopyrite in quartz vein, in contact with mafic. Blebs are irregularly shaped, elongated to semi-circular. 125.0-139.3 -Unit becomes increasingly grey in colour, to grey green with sericite yellow green, slightly harder than above. This may be a dacitic section. Local small quartz veins white to greyish. Foliations are variable 45° to 58° locally contorted. Lower contact is 50°.									
139.3	141.7	Felsic Volcanic-Tuff -fine to medium grained, medium grey to grey green. Unit is sericitic on foliation, contains elongated quartz nodules, dark grey. Upper contact area contains pyrite as veins to dissemination parallel to foliation to 139.8. Chlorite also occurs as elongated lozenges parallel to foliation.									
141.7	151.1	Mafic Volcanic -fine to medium grained, dark chlorite green alternating with pale green layers. Darker layers have chlorite alteration while the paler sections have carbonate/sericite. Unit may be layered tuff due to regularity of banding or layering but locally the pale layers but locally the pale layers appear like large fragments (?) but are up to 40cm in length (generally <8cm). This may be an alteration effect. The unit is calcitic in the matrix and calcite occurs as laminae to 5mm veinlets preferentially at 60° to core axis but cross cut foliation and each other. Little or no sulfides, but where present sulfides are pyrite disseminations Layering 47° to core axis.									
151.1	158.0	Mafic Volcanic -fine grained, medium green to green grey, massive to locally amygduloidal. Unit is calcitic in matrix and as									

Diamond Drill Log

Hole # PAL-HM98-18

Assays											
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
158.0	177.0	<p>laminae to small veinlets. Amygdules are light green calcite ± sericite (?), generally small <1mm but up to porphyroblast size of 0.8cm. This section contains minor alteration bleaching similar to above-pale green feathered edges locally. Pyrite <1% as local concentrations of fine grains, discontinuous up to 2cm.</p> <p>Mafic Volcanic -fine grained, dark green, chloritic local sericite. Unit is generally massive in nature except as noted below. Locally there are elongated chlorite blebs, pyrite is generally minor. 172.9-175.3</p> <p>-unit contains felsic layers up to 30cm with generally sharp contacts, lighter green grey, harder, separated by chloritic mafics. 175.3-177.0</p> <p>-amygduloidal with calcite ± sericite amygdules and calcitic/sericitic possible fragments.</p>									
177.0	184.0	<p>Mafic Volcanic (Fragmental?) -medium grained, medium green matrix, mottled with dark green to dark chlorite supporting felsic fragments? Pale green grey to beige, altered. Matrix has pervasive chlorite to elongated blebs. Fragments are up to 15cm in length. Minor quartz as elongated nodules. Pyrite is minor.</p>									
184.0	205.1	<p>Felsic Volcanic (Rhyolite) fine to medium grained, green to green yellow foliated granular felsic hosting medium grey fine grained hard siliceous felsic. Main rock is sericitized moderately to strongly, calcitic in matrix giving granular appearance foliated at 58-62° to core axis. Sericitization is pervasive over 10-15cm and foliation related. Locally small Lapilli fragments similar to unit occur, elongated on foliation, other fragments are dark grey to blackish possible quartz or fragments of fine rhyolite (good example at 199.0-200.5m). Dark grey siliceous sections are generally unaltered except for alteration on</p>									

Diamond Drill Log

Hole # PAL-HM98-18

							Assays				
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
205.1	209.7	<p>fractures. Lower contact baked for 5cm. 196.5-202.2</p> <p>-strongest continuous sericitization noted to 203.8m. 203.0</p> <p>-10cm of cubic and fine pyrite. Sphalerite grains.</p> <p>Mafic Intrusive -medium grained, dark green with abundant small whitish grey flecks possible leucoxene. Upper contact is sharp at 60° to core axis and chilled while the lower contact is sharp but there is no chilling. Minor cubes of pyrite in the upper 50cm. Minor quartz veining but abundant calcite in matrix and as small discontinuous veinlets.</p>									
209.7	225.1	<p>Felsic Volcanic -fine to medium grained, medium grey to yellow green locally. Unit is similar to above but generally is less altered. Sericitization is localized moderate to strong. Unit contains fragments over 1-2m of similar material. Grey siliceous section noted above are generally absent. Minor spherulites as at 221.0-222.0m. 212.0-213.0</p> <p>-fragmental section with light grey fragments (1 by 4cm) supported in sericitic matrix.</p>									
225.1	269.8	<p>Mafic Volcanic -fine grained to medium grained, dark green, with local sections of black chloritic mafic. The bulk of the unit is leucoxenitic, calcitic in matrix and small veinlets. Quartz veining is minor overall with 10% quartz veining from 226.5-230.7m. Felsic volcanic intercalation's occur randomly as grey siliceous bands as at 255.8-256.6m. Unit may in part be intrusive 261.3-261.6</p> <p>-<1% chalcopyrite as blebs in small quartz vein and as small randomly oriented laminae to veinlets. 263.5-267.7</p> <p>-unit is magnetic moderately to strongly</p>									

Diamond Drill Log

Hole # PAL-HM98-18

							Assays				
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
269.8	280.5	Felsic Volcanic -fine to medium grained, medium grey to grey green, siliceous to quartz rich with sericite, elongated blebs of chlorite. Minor small calcite veinlets. Unit is highly broken to crushed.									
280.5	287.7	Mafic Volcanic -fine to medium grained, medium to dark green, with calcite ± quartz veinlets <0.5mm generally calcite veinlets <2mm.									
287.7	300.0	Felsic Volcanic -fine to medium grained, light to medium grey to grey green, similar to above felsic. Siliceous with minor quartz veins. Possible quartz eyes and feldspar phenocrysts. 298.5-299.7 -Mafic Volcanic fine grained dark green.									
	300.0	End Of Hole Acid Tests 100m -47° 200m -44° 300m -39°									

DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project: Halfmoon
Date: September 24 to 27 1998
Logged by: Robert Calhoun
Drilling Co: Colbert Drilling

DDH: HM98-27

Claim Number: 969269

COLLAR LOCATION: L5000E/10225N

SURVEYS: Acid Test

TIMMINS COORDINATES

GRID COORDINATES

	<u>Depth</u>	<u>Azimuth</u>	<u>Dip</u>
Setup:	0.0	grid south	-50°
	100m		-47°
	200m		-46°

Northing:	10225N
Easting	5000E
Elevation: 0.0	
TD: 255 meters	

DRILLING DATES

Started: September 24 1998
Finished: September 27 1998

982028



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DIAMOND DRILL SUMMARY LOG

Project: Halfmoon
 Date: September 24 to 27 1998
 Logged By: Robert Calhoun

DDH: HM98-27

GEOLOGIC SUMMARY

FROM		TO	DESCRIPTION	INTERVAL			SIGNIFICANT ASSAY AVERAGES				
(m)	(m)			From (m)	To (m)	Width (m)	Cu ppm	Zn ppm	Pb ppm	Ag g/t	Au ppb
0.0	13.8		Overburden								
13.8	24.5		Mafic Volcanic								
24.5	40.3		Mafic Intrusive								
40.3	46.5		Mafic Volcanic								
46.5	255.0		Mafic Intrusive								
255.0			End of Hole								

COMMENTS

Diamond Drill Log

Property: <u>Halfmoon</u>	Hole Number: <u>HM98-27</u>	Claim Number: <u>969269</u>
Location: <u>L5000E/10225N</u>	Final Depth: <u>255 meters</u>	Logged By: <u>Robert Calhoun</u>
Azimuth: <u>Grid South</u>	Dates Drilled: <u>Sept. 24-27/98</u>	Drilled By: <u>Colbert Drilling</u>
Dip: <u>-50°</u>	Dates Logged: <u>Sept. 25-28/98</u>	Signature: _____

Assays											
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
0	13.8	Overburden -boulders minor									
13.8	24.5	Mafic Volcanic -fine to medium grained, medium to dark grey green, massive, featureless. Quartz veining is minor, unit is weakly to moderately siliceous.									
24.5	40.3	Mafic Intrusive -medium grained, pale to medium green due to epidotization and abundant white flecks. Epidote is concentrated around quartz veins but is pervasive through the matrix, pale apple green. Unit is massive and featureless. Quartz veining is abundant as white to greyish veins to 10cm generally. One vein is parallel to sub parallel to core axis from 30.7-32.1m with minor chalcopyrite, possible sphalerite. One cluster of chalcopyrite in quartz vein at 29.6m. Upper contact 48° to core axis, lower contorted.									
40.3	46.5	Mafic Volcanic -fine grained, medium to dark green, weakly foliated at 46° to core axis. Quartz veining minor.									
46.5	255.0	Mafic Intrusive -fine to coarse grained, pale apple green to dark green									

Diamond Drill Log

Hole # HM98-27

						Assays					
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		<p>increasingly coarser grained down hole. Epidote on fractures and pervasive. 46.5-50.8</p> <p>-chilled margin to 46.9m, fine grained, to 48.1m and epidote pervasive in matrix. 50.8-73.0</p> <p>-medium grained, epidotized feldspars evident. Local pervasive epidote over 0.5-1m. Small vein of similar material finer grained with minor pyrite at 66.0-66.3m 10° to core axis. Unit is weakly to moderately magnetic over a few centimeters, randomly distributed. Quartz injection section at 70.1-70.7m dark grey with epidote clasts or xenoliths. 73.0-101.9</p> <p>-coarse gabbroic material with saussuritized feldspars, white feldspars, to pale epidote green. Crushed core at 79.9-80.0m, fault. 101.9-105.1</p> <p>-fine grained, medium grey matrix siliceous layer, pervasive epidote 7.0cm quartz vein near upper contact. 105.1-163.0</p> <p>-medium grained, apple green, epidotized. Unit is hard, siliceous. Small sections similar to above <1m in width. Quartz veining is minor. One contains 5-10% pyrite. This section is generally massive. Feldspars are generally saussuritized. Pyrite ubiquitous <0.5%. 163.0-187.0</p> <p>-Unit as above but is becoming green grey to grey green, increased sections of finer medium grey sections. Siliceous fragment or xenolith at 171.7-172.4m. Smaller fragment above. Small quartz veins 10cm at 167.4-167.5, and at 178.8m. Lower vein has discontinuous veinlet of pyrite 4mm wide. 187.0-217.5</p> <p>-as above but this section has increased altered fractures, pale green at 65° to core axis generally with these fractures there are 10-30cm "veins" of finer medium grey intrusive. More fine grained sections, unit has siliceous sections 0.7m increase in green altered fractures, pyrite in fractures, may be slightly greyer.</p>									

Diamond Drill Log

Hole # HM98-27

Assays											
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		217.5-231.0 -increased finer grey sections, 10-20cm in length, increased fracture alteration. 231.0-255.0 -randomly distributed finer sections local increases in alteration. Chlorite increasing slightly over short sections. Chalcopyrite as trace to minor flecks 246.0-253.0m. Hematite on fractures 249.0-252.0m.									
	255.0	End Of Hole									
		Acid Tests									
		100m -47°									
		200m -46°									

DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project: Halfmoon
Date: September 28 to 30, 1998
Logged by: Robert Calhoun
Drilling Co: Colbert Drilling

DDH: HM98-28

Claim Number: 997539

COLLAR LOCATION: L5000E/9700N

SURVEYS: Acid Test

TIMMINS COORDINATES

GRID COORDINATES

	<u>Depth</u>	<u>Azimuth</u>	<u>Dip</u>	Northing:	9700N
Setup:	<u>0.0m</u>	<u>grid south</u>	<u>-50°</u>	Easting	5000E
	<u>100m</u>		<u>-49°</u>	Elevation: 0.0	
	<u>180m</u>		<u>-49°</u>	TD: 201.0 meters	

DRILLING DATES

Started: September 28, 1998

Finished: September 30, 1998



42A12SE2005 2.19028 ROBB

DIAMOND DRILL SUMMARY LOG

Project: Halfmoon
 Date: September 28 to 30 1998
 Logged By: Robert Calhoun

DDH: HM98-28

GEOLOGIC SUMMARY

FROM		TO	DESCRIPTION	INTERVAL			SIGNIFICANT ASSAY AVERAGES				
(m)	(m)			From (m)	To (m)	Width (m)	Cu ppm	Zn ppm	Pb ppm	Ag g/t	Au ppb
0.0	9.6		Overburden								
9.6	53.5		Intermediate Volcanics								
53.5	91.1		Intermediate Volcanic-Dacite								
91.1	100.2		Felsic Volcanic								
100.2	107.1		Intermediate Volcanic								
107.1	133.4		Felsic Volcanic								
133.4	137.7		Felsic Volcanic								
137.7	154.9		Intermediate to Felsic								
154.9	160.5		Felsic Volcanic-Fragmental								
160.5	169.1		Felsic Volcanic								
169.1	174.9		Felsic Volcanic								
174.9	188.0		Felsic Volcanic								
188.0	196.2		Mafic Volcanic								
196.2	201.0		Felsic Volcanic								
201.0			End of Hole								

COMMENTS

Diamond Drill Log

Property: <u>Halfmoon</u>	Hole Number: <u>HM98-28</u>	Claim Number: <u>997539</u>
Location: <u>L5000E/9700N</u>	Final Depth: <u>201.0 meters</u>	Logged By: <u>Robert Calhoun</u>
Azimuth: <u>Grid South</u>	Dates Drilled: <u>Sept. 28-30/98</u>	Drilled By: <u>Colbert Diamond Drilling</u>
Dip: <u>-50°</u>	Dates Logged: <u>Sept. 28-31/98</u>	Signature: _____

Assays											
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
0	9.6	Overburden									
9.6	53.5	Intermediate Volcanics -a mixed sequence of rock units-hole collared in fine to medium grained dark grey to grey green, felsic fragmental with fragments of porphyritic rhyolite to 11.7m. 11.7-18.1 -intermediate volcanics-silicified with variable amounts of pyrrhotite 3-5%, over 10-20cm with chalcopyrite <0.5%, as disseminations small discontinuous laminae and nodules. 18.1-28.8 -intermediate to mafic volcanics with siliceous sections-medium green. Disseminated pyrrhotite to 1% minor chalcopyrite as disseminations and smeared on fractures as at 18.6m. 28.8-30.4 -felsic Volcanic medium grey siliceous, abundant free quartz. 30.4-38.5 -as above 18.1-28.8-trace sulfides 38.5-41.2 -siliceous felsic with light whitish fragments. Unit has dark grey semi-circular nodules, also siliceous. 41.2-53.5 -intermediate to mafic volcanic with softer chloritic sections, minor pyrite at 52.0-53.5m.									

Diamond Drill Log

Hole # HM98-28

							Assays				
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
53.5	91.1	<p>Intermediate Volcanic-Dacite -fine to medium grained, medium grey to grey green, siliceous, probable tuff. Weakly chloritic ground mass, scratches with a knife. Unit has local sections with sub-angular to sub-rounded dark nodules or possible lapilli as above. Black chlorite occurs within a very fine siliceous band at 63.0-68.0m. This section appears silica flooded. Calcite and/or quartz fills most of the fractures which are generally at 50° to 40° to core axis. Sulfides are nil to trace pyrite.</p> <p>Dolomitic filled amygdules or vesicles occur at 69.8-70.9m.</p> <p>82.8-85.2 -siliceous flood, fragmental section with fragments of feldspar porphyry, siliceous pale grey. Fragments are up to 3cm in size.</p> <p>Lower contact 44° to core axis.</p>									
91.1	100.2	<p>Felsic Volcanic -fine grained, medium grey to glassy light grey with dark grey green spots. The irregular spots are up to 0.5cm, probable chlorite giving the core a "leopard" appearance over 1.5m.</p> <p>Lower contact 30°</p>									
100.2	107.1	<p>Intermediate Volcanic -as above Dacite.</p>									
107.1	133.4	<p>Felsic Volcanic -fine to medium grained overall, medium to dark grey, locally dark green chloritic. This section is very variable in textures ranging from very fine featureless to spotted as above intermediate to auto brecciated (fragmental). Chlorite occurs as 10-20cm sections dark green to blackish as at 113.8,123.0m. Fragmented sections are as 118.1-120.2m.</p> <p>Dark spots or vesicles 120.2-126.0m are hard siliceous, while the spots below are softer possibly weakly chloritic. This section is quite competent with only occasional fractures having crushed core. Most fractures are 60° to</p>									

Diamond Drill Log

Hole # HM98-28

							Assays				
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		core axis with others at 80 and 40° to core axis. One fracture at 129.5m runs sub-parallel to core axis to 131.8m. Calcite occurs on most fractures while quartz occurs locally.									
133.4	137.7	Felsic Volcanic -fine grained, pale grey to yellowish green, siliceous to glassy, with dark green chlorite nodules. These nodules can exceed 1cm in size but generally are <3.0mm in size. The yellowish green colouration is probably due to sericite alteration.									
137.7	154.9	Intermediate to Felsic -fine grained, medium grey to dark grey, locally bleached pale green. Although the textures are quite variable the dominating feature is the dark green to dark grey spots which can reach 10-20% of unit locally. These spots are probably vesicles. One small section 145.4-146.1m contains vesicles which are ringed, dark chlorite centers with pale "feldspar" rims. The vesicles are generally <2.0mm or less in size but can reach 5mm. Within the unit 10-20cm chlorite rich bands occur randomly, 142.2m, fine ash?									
154.9	160.5	Felsic Volcanic-Fragmental -fine to medium grained medium to light grey siliceous matrix which hosts fragments to 4cm of medium grey porphyry sub rounded to sub angular. The upper and lower contacts are fine grained siliceous, to glassy. The lower contact area is light grey to whitish. The fragmental portion is the center of the unit. Lower contact 52° to core axis.									
160.5	169.1	Felsic Volcanic -fine grained, medium grey with vesicular texture returning again as "bands" of variable abundance. These are as described above(137-154.9). Possible flow structures within this unit. 162.9-165.8 -fine grained, dark grey to green, chloritic fine layer with									

Diamond Drill Log

Hole # HM98-28

Assays											
From	To	Description	Sample #	From	To	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		local probably dolomite filled vesicles, effervesce when crushed. Contacts appear gradational.									
169.1	174.9	Felsic Volcanic -fine grained, pale grey tuff? With local carbonate nodules and possible feldspar amygdules(?) to 1cm. Unit is massive generally featureless, softer than above or below. One small quartz carbonate vein at 170.6 has minor chalcopyrite.									
174.9	188.0	Felsic Volcanic -fine grained, medium to dark grey green, siliceous to glassy as described above, with chloritic nodules to 0.5cm. Sericite again occurs in this unit. Lower contact 33° to core axis.									
188.0	196.2	Mafic Volcanic -fine to medium grained, medium to dark green, medium hard. Numerous calcite and/or quartz filled fractures. Massive in appearance with leucoxene abundant locally ubiquitous. Minor chlorite rich section 1-5cm in width. Lower contact 36° to core axis. Very minor pyrite at upper contact.									
196.2	201.0	Felsic Volcanic -fine to medium grained, medium grey to locally light to medium grey. Probably a tuff from the crystalline texture. Local silicification gives glassy appearance as above with quartz/feldspar patchy whitish.									
	201.0	End Of Hole Acid Test 100 m -49° 180 m -49°									

Item.	Hole # -	Claim #	Claim #	Claim #	TOTAL.
Drilling.	98-18.	10200.			10200
Drilling	98-27			8670.	8670
Drilling -	98-28		6834.		6834
MATERIAL LEFT		1612	713	1033	3358
Geologist		1500	1500	1500.	4500
Borseru + Asses Rep		70	70	70.	210.
FLOATING		120.	88	88	296.
SubTOTAL -		13502.	9205.	11361	34068
GST.		945.	644.	795.	2385
TOTAL -		14,447	9,849	12,157	36,453

RECEIVED
DEC 02 1993
GEOSCIENCE ASSESSMENT
OFFICE





Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 66(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W986.00869
Assessment Files Research Imaging



42A12SE2005 2.19028 ROBB 900

Sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this work and correspond with the mining land holder. Questions about this collection should be directed to the Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

- Instructions:
- For work performed on Crown Lands before recording a claim, use form 0240.
 - Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary)

Name JOHN P. HOLT	Client Number 146892
Address 36 MAPLE ST - So TIMMINS ONTARIO	Telephone Number 705-267-6464
	Fax Number 705 264-3260
Name FALCONBRIDGE LIMITED	Client Number 130679
Address 95 WELLINGTON ST WEST SUITE 1200 TORONTO ONTARIO M5J 2U4	Telephone Number 416-956-5786
	Fax Number 416 956 5749

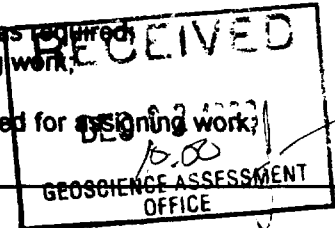
2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Geotechnical: prospecting, surveys, assays and work under section 18 (regs)
 Physical: drilling stripping, trenching and associated assays
 Rehabilitation

Work Type: **Diamond Drilling**

CH 98-28 Sept 28-30/98 HM 98-27 Sept 24-27/98 HM 98-18 July 13-17/98	Office Use
	Commodity
	Total \$ Value of Work Claimed 36,453
	NTS Reference
Dates Work Performed	Mining Division Porcupine
Global Positioning System Data (if available)	Resident Geologist District Timmins
Township/Area Robb	
M or G-Plan Number G 3968	

- Please remember to:
- obtain a work permit from the Ministry of Natural Resources as required;
 - provide proper notice to surface rights holders before starting work;
 - complete and attach a Statement of Costs, form 0212;
 - provide a map showing contiguous mining lands that are linked for assaying work;
 - include two copies of your technical report.



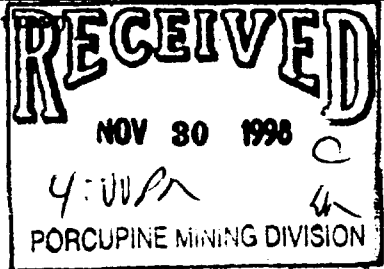
3. Person or companies who prepared the technical report (Attach a list if necessary)

Name Lionel Berhonne Agent	Telephone Number 705-267-3511
Address 168 ALGONQUIN BLVD EAST TIMMINS	Fax Number 705 267 3121
Name R. CALHOUN	Telephone Number 705 268 0693
Address 442 LAMERGAN BLVD TIMMINS P4N 6E1	Fax Number 705 268-0721
Name	Telephone Number
Address	Fax Number

4. Certification by Recorded Holder or Agent

I, Lionel Berhonne Agent, do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent	Date Nov 30/98
Agent's Address 168 ALGONQUIN BLVD EAST TIMMINS	Telephone Number 705 267 3511
	Fax Number 705 267-3121



Deemed February 28/99

5 Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

4980.00869

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$ 8,892	\$ 4,000	0	\$4,892
1 1190197	1	14,447		551	13896
2 997539	1	9849		9849	0
3 969269	1	12157		12000	157
4 1212930	15		6000		
5 1212929	16		6400		
6 1212931	12		4800		
7 1212932	13		5200		
8					
9					
10					
11					38
12					
13					
14					
15					
Column Totals		36,453	22,400	22,400	14,053

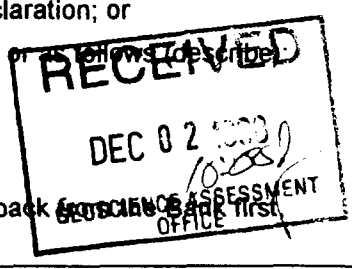
I, Lind Barbara Agut (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: [Signature] Date: November 30/98

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

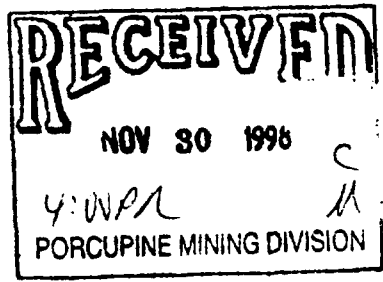


Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)



Personal information collected on this form is obtained under the authority of subsection 8(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
HM 98-18	300 Metres	34.00	10200
HM 98-27	255 Metres	34.00	8670
HM 98-28	201 Metres	34.00	6834
			28
Associated Costs (e.g. supplies, mobilization and demobilization).			
MATERIAL LEFT IN HOLE	98-18		1612
	98-27		1033
	98-28		713
Geologist	15 DAYS		4500.
Borsaru + Assessment Report			210.
Transportation Costs			
	Floating		296.
Food and Lodging Costs			
	Sub Total		34068.
	7% GST		2385.
	Total Value of Assessment Work		36,453

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DEC 02 1998

Conditions of Filing Claims:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the following formula:

TOTAL VALUE OF ASSESSMENT WORK \times 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, Lionel Borchmann, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Agent I am authorized to make this certification.

RECEIVED
NOV. 30 1998
YOUNG
PORCUPINE MINING DIVISION

Signature: [Signature] Date: Nov 30/98

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (877) 670-1555

January 15, 1999

JOHN PETER HUOT
168 ALGONQUIN BOULEVARD EAST
TIMMINS, ONTARIO
P4N-1A9

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Dear Sir or Madam:

Submission Number: 2.19028

Status

Subject: Transaction Number(s): W9860.00869 Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.19028

Date Correspondence Sent: January 15, 1999

Assessor: Lucille Jerome

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00869	1190197	ROBB	Deemed Approval	January 15, 1999

Section:
16 Drilling PDRILL

Correspondence to:

Resident Geologist
South Porcupine, ON

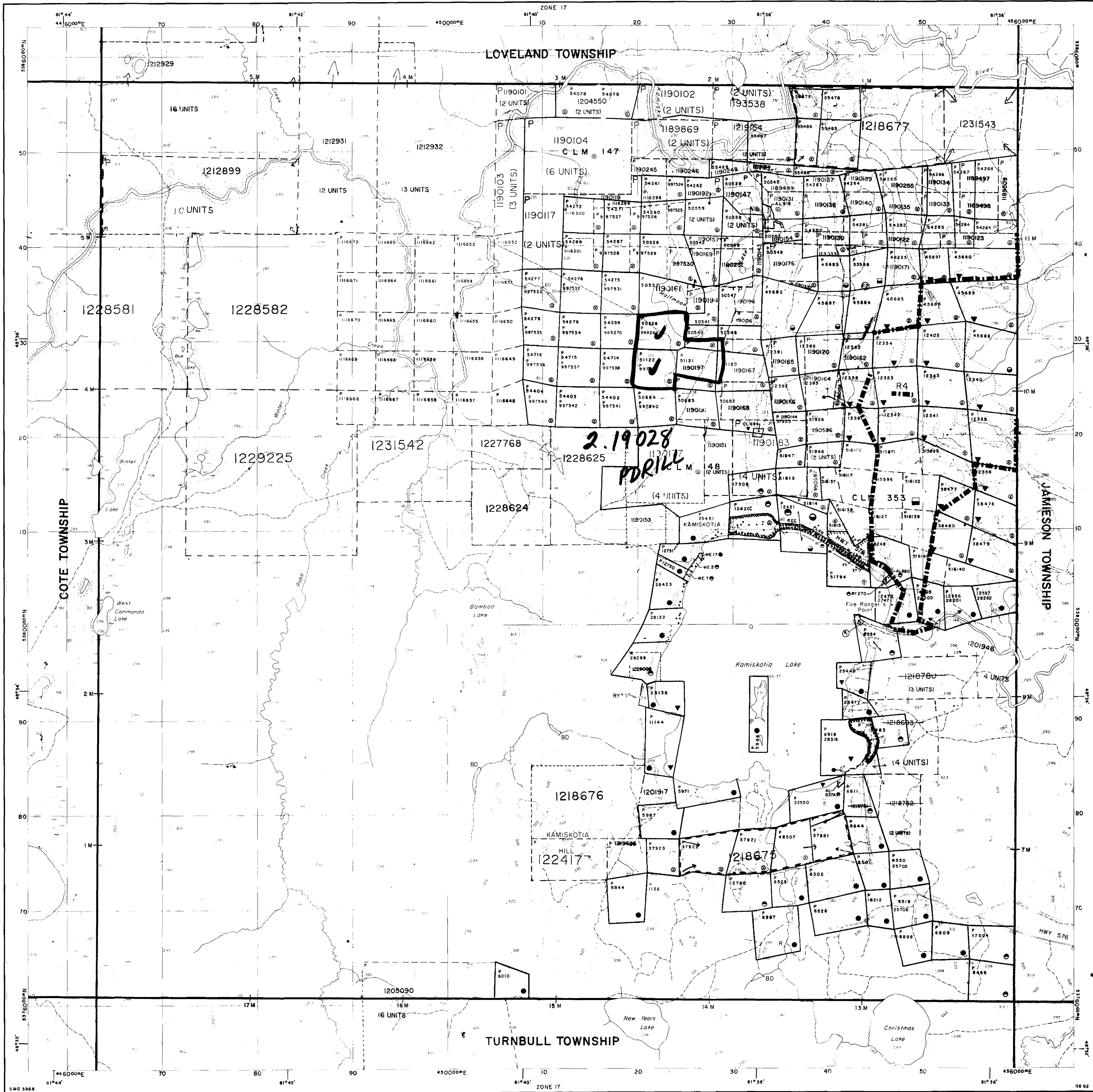
Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Lionel Bonhomme
TIMMINS, ONTARIO, CANADA

JOHN PETER HUOT
TIMMINS, ONTARIO

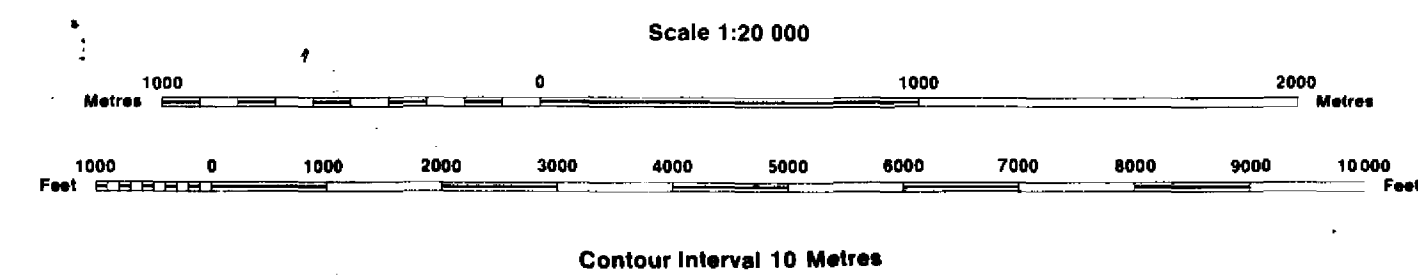
FALCONBRIDGE LIMITED
TORONTO, ONTARIO



INDEX TO LAND DISPOSITION

PLAN
 G-3968
 TOWNSHIP
ROBB

M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
 MINING DIVISION
PORCUPINE
 LAND TITLES/REGISTRY DIVISION
COCHRANE



AREAS WITHDRAWN FROM DISPOSITION

- MRO - Mining Rights Only
- SRO - Surface Rights Only
- M+S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File
M.N.R. RESERVE				

SYMBOLS

Boundary	.....
Township, Meridian, Baseline	.....
Road allowance: surveyed	.....
unsurveyed	.....
Lot/Concession: surveyed	.....
unsurveyed	.....
Parcel: surveyed	.....
unsurveyed	.....
Right-of-way, road	.....
railway	.....
utility	.....
Reservation	.....
Cliff, Pit, Pile	.....
Contour	.....
Interpolated	.....
Approximate	.....
Depression	.....
Control point (horizontal)	.....
Flooded land	.....
Mine head frame	.....
Pipeline (above ground)	.....
Railway: single track	.....
double track	.....
abandoned	.....
Road: highway, county, township	.....
access	.....
trail, bush	.....
Shoreline (original)	.....
Transmission line	.....
Wooded area	.....

THIS TWP IS SUBJECT TO FOREST ACTIVITIES IN 1992/93. FURTHER INFORMATION AVAILABLE ON FILE.

PLANS OF SUBDIVISION - NOT OPEN FOR STAKING

PROPOSED SURFACE RIGHTS DISPOSITION UNDER THE P.L.A. - NOTICE RECEIVED MARCH 7, 1991

THIS TWP IS SUBJECT TO FOREST ACTIVITY IN 1994/95. FURTHER INFORMATION ON FILE.

MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 35 OF THE MINING ACT, R.S.O. 1990 - ORDER NO. W.P. 6/97 NER DATED APR. 26/97

MINING AND SURFACE RIGHTS RE-OPENED - ORDER NO. W.P. 6/97 NER DATED APR. 26/97

MINING AND SURFACE RIGHTS WITHDRAWN - ORDER NO. W.P. 6/97 NER DATED APR. 26/97

MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 35 OF THE MINING ACT, R.S.O. 1990 - ORDER NO. W.P. 6/97 NER DATED APR. 26/97

DISPOSITION OF CROWN LANDS

Patent	.....
Surface & Mining Rights	.....
Surface Rights Only	.....
Mining Rights Only	.....
Lease	.....
Surface & Mining Rights	.....
Surface Rights Only	.....
Mining Rights Only	.....
Licence of Occupation	.....
Order-in-Council	.....
Cancelled	.....
Reservation	.....
Sand & Gravel	.....

DATE OF ISSUE

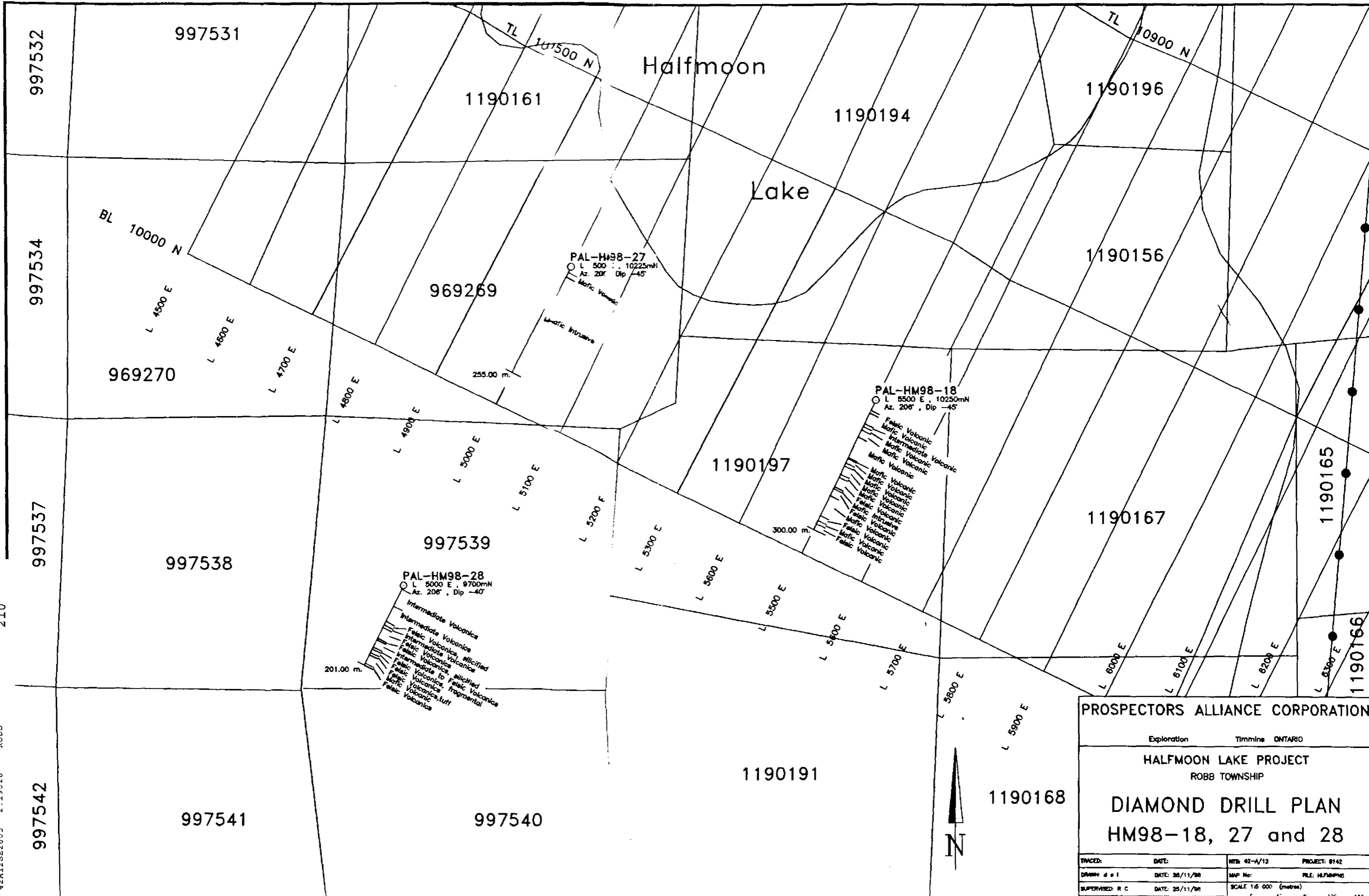
APR 20 1999
 PROVINCIAL RECORDING
 OFFICE - SUDBURY

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

ACTIVATED AUGUST 13, 1999
 BY D.C.
 CHECKED BY G.W.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.





PROSPECTORS ALLIANCE CORPORATION

Exploration Timmins ONTARIO

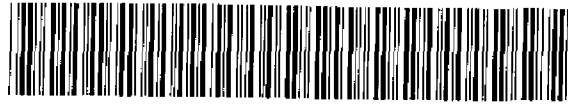
HALFMOON LAKE PROJECT
ROBB TOWNSHIP

DIAMOND DRILL PLAN
HM98-18, 27 and 28

TRACED:	DATE:	HTS: 42-A/12	PROJECT: 8142
DRAWN: d s l	DATE: 25/11/98	MAP No:	FILE: HM98PMS
SUPERVISED: R C	DATE: 25/11/98	SCALE: 1:5 000 (metres)	

42A125E2005 2.19028 ROBB 210

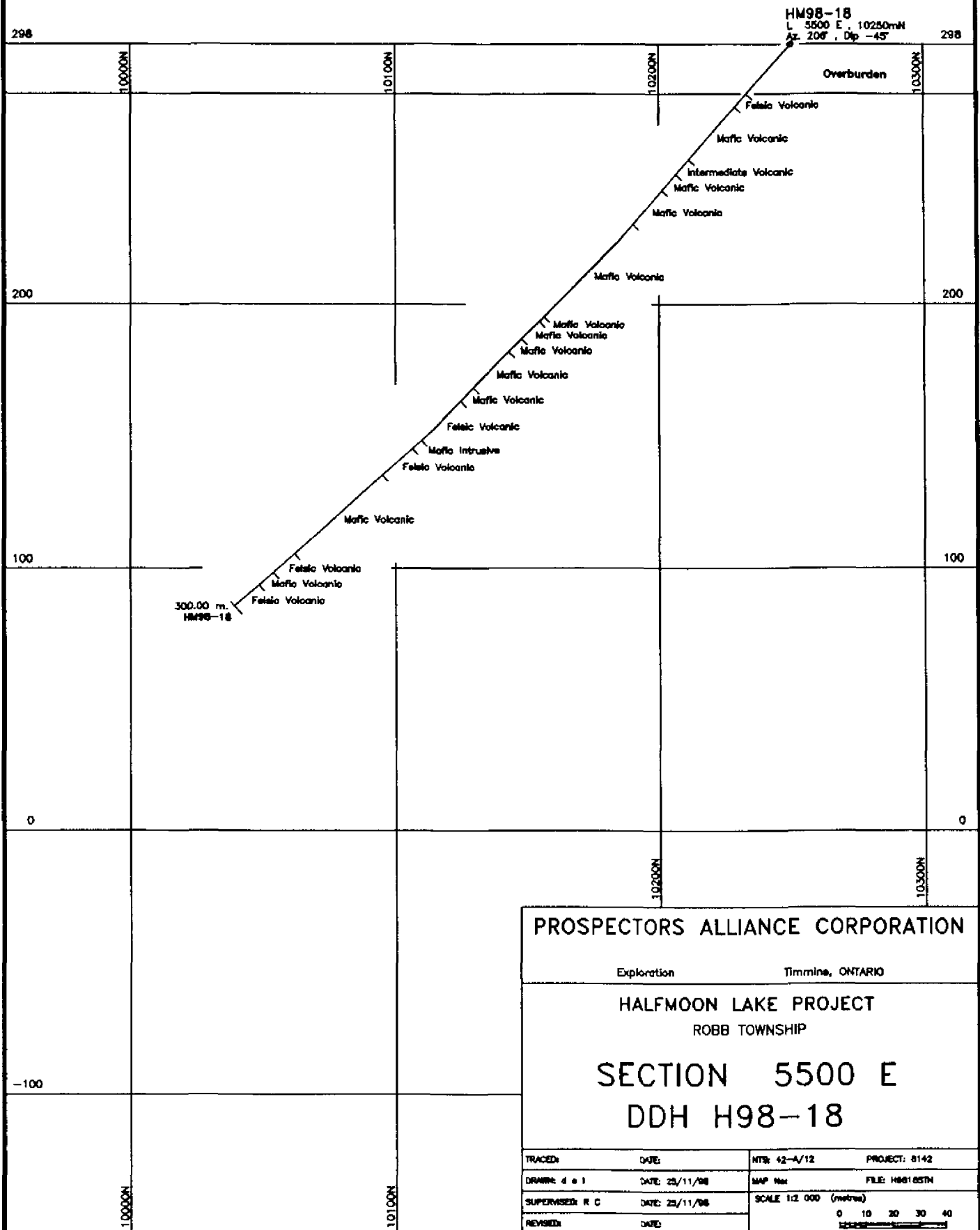




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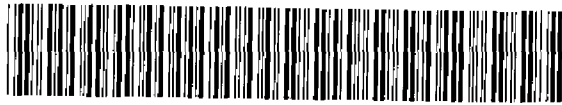
PROSPECTORS ALLIANCE CORPORATION

Exploration Timmins, ONTARIO

HALFMOON LAKE PROJECT
ROBB TOWNSHIP

SECTION 5500 E
DDH H98-18

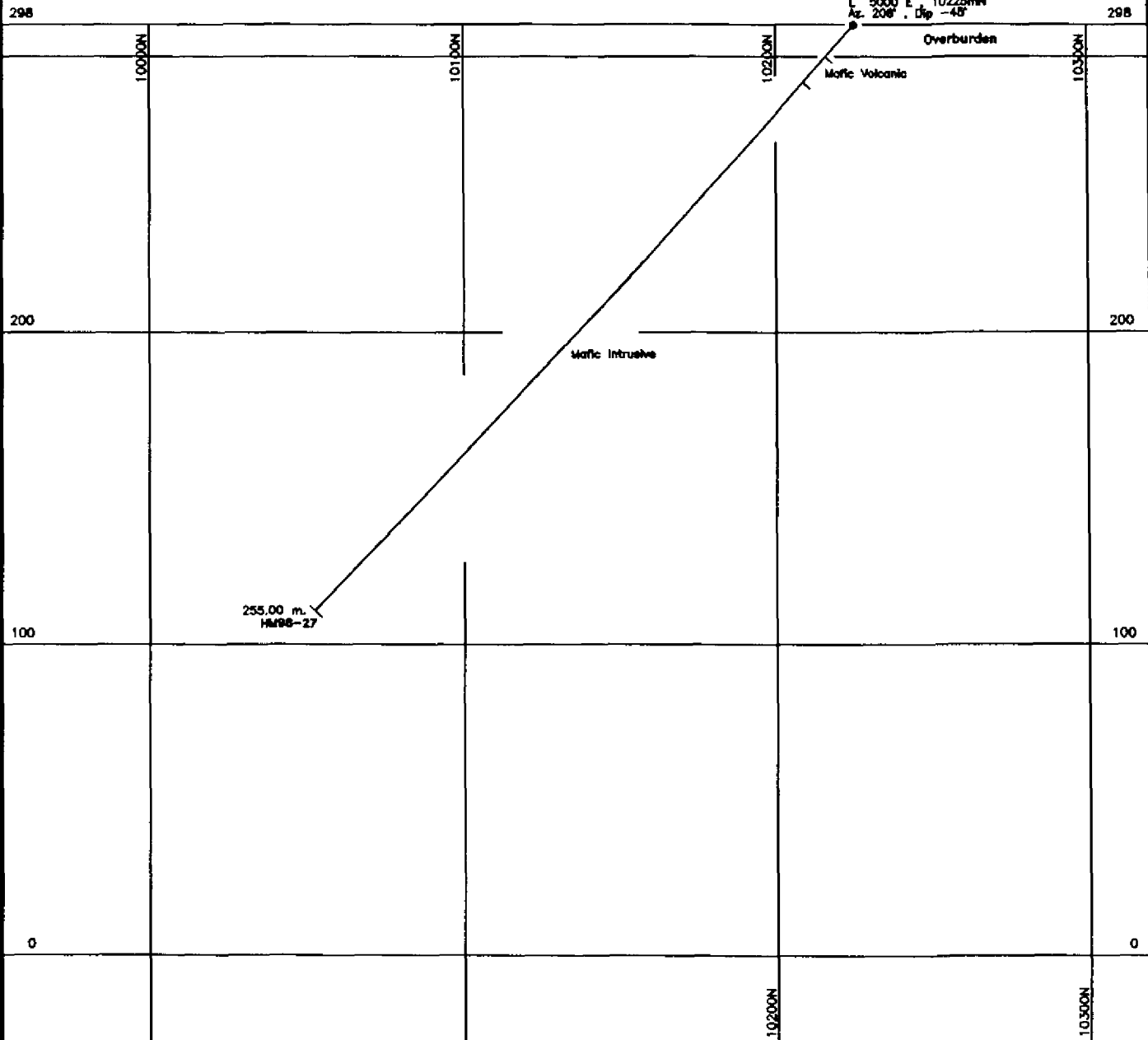
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PROSPECTORS ALLIANCE CORPORATION

Exploration Timmins, ONTARIO

HALFMOON LAKE PROJECT
ROBB TOWNSHIP

SECTION 5000 E
DDH H98-27

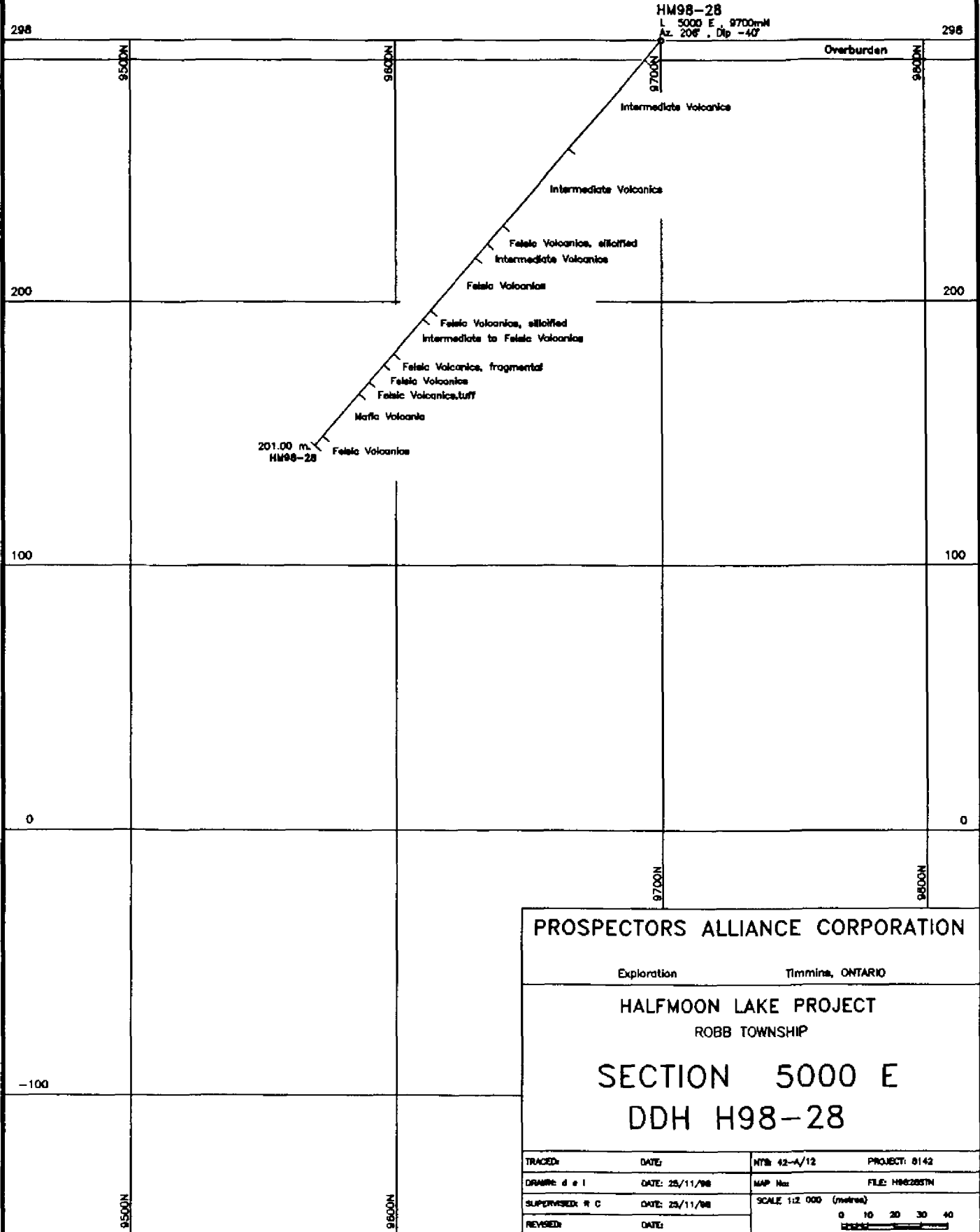
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SUPERVISED: R C	DATE: 25/11/98	SCALE 1:2 000 (metres)	
REVISED:	DATE:	0 10 20 30 40	



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240



HM98-28
 L 5000 E, 9700mN
 Az. 206°, Dip -40°

Overburden

Intermediate Volcanics

Intermediate Volcanics

Felele Volcanics, silicified
Intermediate Volcanics

Felele Volcanics

Felele Volcanics, silicified
intermediate to Felele Volcanics

Felele Volcanics, fragmental

Felele Volcanics

Felele Volcanics, tuff

Mafic Volcanics

201.00 m.
HM98-28 Felele Volcanics

PROSPECTORS ALLIANCE CORPORATION

Exploration

Timmins, ONTARIO

HALFMOON LAKE PROJECT

ROBB TOWNSHIP

SECTION 5000 E

DDH H98-28

TRACED:	DATE:	NY# 42-A/12	PROJECT: 0142
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SUPERVISED: R C	DATE: 25/11/98	SCALE 1:2 000 (metres)	
REVISED:	DATE:	0 10 20 30 40 metres	